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SNELL & WILMER LLP
1920 MAIN STREET
SUITE 1200
IRVINE, CA 92614-7230

EXAMINER	
GELAGAY, SHEWAYE	
ART UNIT	**PAPER NUMBER**
2133	

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/023,021	FUKAMI ET AL.	
	Examiner	Art Unit	
	Shewaye Gelagay	2133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☒ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *8/4/03;3/31/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-34 have been examined.

Oath/Declaration

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because: It is not signed by the inventors.

Priority

3. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on December 15, 2000. It is noted, however, that applicant has not filed a certified copy of the 2000-381870 application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 22-25 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. It is not tangibly embodied as it is only software per se. It is suggested that the claimed subject matter "a program ..." should be changed to "a program stored on a computer-readable medium ...".

6. Claims 26-29 are rejected under 35 U.S.C. 101 because the claimed invention recites a recording medium that could be interpreted consistent with the specification as paper or any other recording medium. It is not tangibly embodied on a computer-readable medium. It is suggested that the claimed subject matter "a recording medium ..." should be changed to "a computer-readable recording medium ...".

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 11-12, 15, 17-19, 21-29 and 31-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirose United States Letter Patent Number 5,917,915.

As per claim 1, 22, 26 and 31:

Hirose teaches a method, a program, a recording medium and a reception apparatus which receives and reproduces scrambled content, comprising:

reception means for receiving the scrambled content, wherein the scrambled content is scrambled so that a predetermined unit of scrambled content, which is a portion of the scrambled content, is descrambled using a descrambling key

corresponding to the predetermined unit of scrambled content, and at least one piece of storage information in which a list including all descrambling keys to be used for descrambling the scrambled content is embedded; (Col. 3, lines 2-14)

storage means for storing the received scrambled content and the storage information; (Col. 3, lines 34-38)

list extraction means for extracting the list from the stored storage information; (Col. 3, line 39; *read means is interpreted as list extraction means; the interpretation is given based on the similarity of the functionality of the read means and the list extraction means*)

descramble processing means for (a) extracting the predetermined unit of scrambled content from the stored scrambled content, (Col. 10, lines 17-26) (b) extracting a descrambling key corresponding to the predetermined unit of scrambled content from the extracted list, (Col. 3, lines 40-43) and (c) descrambling the extracted predetermined unit of scrambled content using the extracted descrambling key; and reproduction means for reproducing the predetermined unit of descrambled content in the descrambled order. (Col. 3, lines 43-45)

As per claim 2:

Hirose teaches all the subject matter as discussed above. In addition, Hirose further discloses a reception apparatus wherein

the reception means receives one piece of storage information in which the list is embedded, (Col. 3, lines 2-14)

the storage means stores the received scrambled content and the one piece of storage information, (Col. 10, lines 17-26) and

the list extraction means extracts the list from the stored one piece of storage information. (Col. 3, lines 39-43)

As per claim 3:

Hirose teaches all the subject matter as discussed above. In addition, Hirose further discloses a reception apparatus wherein

the reception means receives a plurality of pieces of storage information in each piece of which a divided portion of the list is embedded, (Figure 6, item 8)

the storage means stores the received scrambled content and the plurality of pieces of storage information, (Col. 10, lines 17-26) and

the list extraction means extracts the list from the stored plurality of pieces of storage information. (Col. 3, lines 39-43)

As per claim 11:

Hirose teach all the subject matter as discussed above. In addition, Hirose further discloses a reception apparatus managing contract information and consisting of a security module whose portion does not effectively function if a contract has not been made, and other modules, the reception apparatus further comprising:

list holding means for holding the list extracted by the list extraction means, (Figure 11, item 101 and 111)

wherein the list extraction means and the list holding means are provided within the security module. (Figure 11, item 101 and 111)

As per claim 12, 23, 27 and 32:

Hirose teaches a method, a program, a recording medium and a reception apparatus which receives and reproduces scrambled content, comprising:

reception means for receiving the scrambled content, wherein the scrambled content is scrambled so that a predetermined unit of scrambled content, which is a portion of the scrambled content, is descrambled using a descrambling key corresponding to the predetermined unit of scrambled content, and a descrambling key is attached to each predetermined unit of scrambled content; (Col. 3, lines 2-14)

storage means for storing the received scrambled content; (Col. 3, lines 34-38)

list generation means for, when/after storing the received scrambled content by the storage means, generating a list including all descrambling keys to be used for descrambling the scrambled content, based on the descrambling key attached to each predetermined unit of scrambled content; (Col. 3, line 39)

descramble processing means for (a) extracting the predetermined unit of scrambled content from the stored scrambled content, (Col. 10, lines 17-26) (b) extracting a descrambling key corresponding to the extracted predetermined unit of scrambled content from the generated list, (Col. 3, lines 40-43) and (c) descrambling the extracted predetermined unit of scrambled content using the extracted descrambling key; (Col. 43-45) and

reproduction means for reproducing the predetermined unit of descrambled content in the descrambled order. (Col. 7, lines 66-67 and Col. 8, lines 1-6)

As per claim 15, 24, 28, and 33:

Hirose teaches a method, a program, a recording medium and a broadcast apparatus which scrambles content and broadcasts the scrambled content to a reception apparatus, the broadcast apparatus comprising:

acquisition means for acquiring content to be scrambled and a plurality of descrambling keys; (Col. 2, lines 50-57; Col. 5, lines 14-17 and lines 39-40)

scramble processing means for scrambling a predetermined unit of content out of the acquired content so that the predetermined unit of scrambled content is descrambled using a descrambling key different for each predetermined unit or each set of a plurality of predetermined units; (Col. 2, lines 61-67; Col. 5, lines 19-23)

attaching means for attaching auxiliary information to the predetermined unit of scrambled content, the auxiliary information consisting of (a) information for identifying the scrambled content (Col. 5, line 67) and (b) a descrambling key corresponding to the content, and used for having the reception apparatus generate a list of the descrambling keys; (Col. 5, lines 65-66) and

broadcast means for broadcasting the scrambled content to which the auxiliary information is added. (Figure 1, item 4; Col. 2, lines 23-24)

As per claim 17, 25, 29 and 34:

Hirose teaches a method, a program, a recording medium and a broadcast apparatus which scrambles content and broadcasts the scrambled content to a reception apparatus, the broadcast apparatus comprising:

acquisition means for acquiring content to be scrambled and a plurality of descrambling keys; (Col. 2, lines 50-57; Col. 5, lines 14-17 and lines 39-40)

list generation means for generating a list of the descrambling keys; ((Col. 5, lines 18-19)

embedding means for embedding the list in at least one piece of predetermined information to generate at least one piece of storage information; (Col. 5, lines 20-23)

scramble processing means for scrambling a predetermined unit of content out of the acquired content so that the predetermined unit of scrambled content is descrambled using a descrambling key different for each predetermined unit or each set of a plurality of predetermined units; (Col. 2, lines 61-67; Col. 5, lines 19-23) and

broadcast means for broadcasting the generated storage information and the scrambled content. (Figure 1, item 4; Col. 2, lines 23-24)

As per claim 18:

Hirose teaches all the subject matter as discussed above. In addition, Hirose further discloses a broadcast apparatus wherein the embedding means embeds the list in one piece of predetermined information to generate one piece of storage information, and the broadcasting means broadcasts the generated one piece of information and the scrambled content. (Col. 5, lines 20-34 and lines 43-46)

As per claim 19:

Hirose teaches all the subject matter as discussed above. In addition, Hirose further discloses a broadcast apparatus wherein the embedding means embeds a divided portion of the list in each of a plurality of pieces of predetermined information to generate a plurality of pieces of storage information, and the broadcasting means

broadcasts the generated plurality of pieces of storage information and the scrambled content. (Col. 5, lines 20-34 and lines 43-46)

As per claim 21:

Hirose teaches all the subject matter as discussed above. In addition, Hirose further discloses a broadcast apparatus wherein the broadcast means broadcasts one set of the storage information while all the scrambled content corresponding to the storage information are broadcast once. (Col. 14, lines 65-67 and Col. 15, lines 1-5)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 4, 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose United States Letter Patent Number 5,917,915 further in view of Morinaga et al. United States Letter Patent Number 6,792,000.

As per claim 4:

Hirose teaches all the subject matter as disclosed above. In addition, Hirose further discloses a reception apparatus wherein

the reception means sequentially receives a transport stream (TS) packet including the predetermined unit of scrambled content, (Col. 3, lines 2-14, Hirose)

the storage means sequentially stores the received TS packet, (Col. 3, lines 34-38, Hirose) wherein the descramble processing means includes:

scrambled content extraction means for extracting the predetermined unit of scrambled content from one of the TS packets stored in the storage means, and counting the ordinal position of the TS packet from the leading TS packet; (Col. 10, lines 43-45, Hirose)

descrambling key extraction means for extracting a descrambling key from the list, based on the counted ordinal position; (Col. 3, lines 40-43, Hirose) and

descrambling means for descrambling the extracted predetermined unit of scrambled content using the extracted descrambling key. (Col. 10, lines 43-45, Hirose)

Hirose does not explicitly disclose sequentially receiving and storing a transport stream packet (TS) packet; and extracting the predetermined unit of scrambled content from one of the TS packets stored in the storage means, and counting the ordinal position of the TS packet from the leading TS packet.

Morinaga et al. in analogous art, however, disclose receiving and storing a transport stream packet (TS) packet; (Col. 4, lines 13-31, Morinaga) and extracting the predetermined unit of scrambled content from one of the TS packets stored in the storage means, and counting the ordinal position of the TS packet from the leading TS packet. (Col. 1, lines 39-57, Morinaga)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the device disclosed by Hirose to include sequentially receiving and storing a transport stream packet (TS) packet; and extracting the predetermined unit of scrambled content from one of the TS packets stored in the storage means, and counting the ordinal position of the TS packet from the leading TS packet. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Morinaga et al. (Col. 1, lines 12-13) in order to have a system capable of simultaneous recoding and reproducing of broadcast program.

As per claim 8:

Hirose teaches all the subject matter as disclosed above. In addition Hirose further discloses a reception apparatus wherein

the reception means sequentially receives a TS packet including (a) the predetermined unit of scrambled content (Col. 3, lines 2-14, Hirose) and

the storage means sequentially stores the received TS packet (Col. 3, lines 34-38, Hirose), wherein

the descramble processing means includes:

scrambled content extraction means for extracting the predetermined unit of scrambled content and the packet specifying information from one of the TS packets stored in the storage means; (Col. 10, lines 43-45, Hirose)

descrambling key extraction means for extracting a descrambling key from the list, based on the extracted packet specifying information; (Col. 3, lines 40-43, Hirose) and

descrambling means for descrambling the extracted predetermined unit of scrambled content using the extracted descrambling key. (Col. 10, lines 43-45, Hirose)

Hirose does not explicitly disclose a packet specifying information for specifying an unscrambled TS packet; sequentially receiving and storing a transport stream packet (TS) packet; and extracting the predetermined unit of scrambled content from one of the TS packets stored in the storage means, and counting the ordinal position of the TS packet from the leading TS packet.

Morinaga et al. in analogous art, however, disclose a packet specifying information for specifying an unscrambled TS packet; (Col. 6, lines 19-33, Morinaga) receiving and storing a transport stream packet (TS) packet; (Col. 4, lines 13-31, Morinaga) and extracting the predetermined unit of scrambled content from one of the TS packets stored in the storage means, and counting the ordinal position of the TS packet from the leading TS packet. (Col. 1, lines 39-57, Morinaga)

The rational for combining the above references is the same as claim 4 above.

As per claim 13:

Hirose teaches all the subject matter as disclosed above. In addition, Hirose further discloses a reception apparatus wherein the reception means for receiving (a) the predetermined unit of scrambled content, and (b) auxiliary information including a descrambling key and information for associating the descrambling key with scrambled content, (Col. 3, lines 2-14, Hirose)

the storage means sequentially stores the received TS packet, (Col. 3, lines 34-38, Hirose) and

the list generation means generates the list, based on the auxiliary information. (Col. 3, line 39)

Hirose does not explicitly disclose sequentially receiving and storing a transport stream packet (TS) packet.

Morinaga et al. in analogous art, however, disclose receiving and storing a transport stream packet (TS) packet. (Col. 4, lines 13-31, Morinaga)

The rationale for combining the above references is the same as claim 4 above.

11. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose United States Letter Patent Number 5,917,915 in view of Morinaga et al. United States Letter Patent Number 6,792,000 and further in view of Kahn et al. United States Letter Patent Number 6,853,728.

As per claim 9:

Hirose and Morinaga et al. teach all the subject matter as discussed above. In addition, Hirose further disclose a reception apparatus wherein

the descrambling key extraction means performs a predetermined operation to the extracted information as the packet identifying information to generate a descrambling key identifier, and extracts a descrambling key from the list based on the descrambling key identifier. (Col. 3, lines 40-43 and Col. 10, lines 43-45, Hirose)

In addition Morinaga et al. further disclose receiving and storing a transport stream packet (TS) packet; (Col. 4, lines 13-31, Morinaga) and extracting the predetermined unit of scrambled content from one of the TS packets stored in the storage means, and counting the ordinal position of the TS packet from the leading TS packet. (Col. 1, lines 39-57, Morinaga)

Both references do not explicitly disclose

the packet specifying information is one of Continuity Counter (CC), the number of TS packets, a cumulative amount of data, a relative reproduction time, and a scrambling key identifier,

the scrambled content extraction means extracts, as the packet specifying information, one of the Continuity Counter (CC), the number of TS packets, the cumulative amount of data, the relative reproduction time, and the scrambling key identifier,

Kahn et al. in analogous art, however, discloses the packet specifying information is one of Continuity Counter (CC), the number of TS packets, a cumulative amount of data, a relative reproduction time, and a scrambling key identifier, (Col. 6, lines 30-46, Kahn)

the scrambled content extraction means extracts, as the packet specifying information, one of the Continuity Counter (CC), the number of TS packets, the cumulative amount of data, the relative reproduction time, and the scrambling key identifier, (Col. 6, lines 30-46)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the device disclosed by Hirose and Morinaga et al. to include the packet specifying information is one of Continuity Counter (CC), the number of TS packets, a cumulative amount of data, a relative reproduction time, and a scrambling key identifier; and the scrambled content extraction means extracts, as the packet specifying information, one of the Continuity Counter (CC), the number of TS packets, the cumulative amount of data, the relative reproduction time, and the scrambling key identifier. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Kahn et al. (Col. 6, lines 26-27) in order to resemble the packets to regenerate the program material.

12. Claims 5-7, 14, 16, 20 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose United States Letter Patent Number 5,917,915 in view of Morinaga et al. United States Letter Patent Number 6,792,000 and further in view of Sato United States Letter Patent Number 6,219,422.

As per claim 5:

Hirose teaches all the subject matter as disclosed above. Hirose does not explicitly disclose a reception apparatus wherein the reception means receives at least

one storage Entitlement Control Message (ECM) as the at least one piece of storage information, the list being embedded in a portion to be encoded in the main body of the ECM, the storage means stores the received storage ECMs, and the list extraction means interprets the stored storage ECMs to extract the list.

Sato in analogous art, however, disclose a reception means receives at least one storage Entitlement Control Message (ECM) as the at least one piece of storage information, the list being embedded in a portion to be encoded in the main body of the ECM, the storage means stores the received storage ECMs, and the list extraction means interprets the stored storage ECMs to extract the list. (Col. 8, lines 17-27, Sato)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the device disclosed by Hirose to include a reception means receives at least one storage Entitlement Control Message (ECM) as the at least one piece of storage information, the list being embedded in a portion to be encoded in the main body of the ECM, the storage means stores the received storage ECMs, and the list extraction means interprets the stored storage ECMs to extract the list. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Sato (Col. 4, lines 39-42) in order to decrypt the information data which was selectively reproduced, so that deterioration of the reliability of the conditional access can be prevented.

As per claim 6:

Hirose and Sato teach all the subject matter as disclosed above. In addition, Sato further discloses a reception apparatus wherein the reception means receives the

storage ECMs including identifying information for distinguishing the storage ECMs from another type of ECM. (Col. 8, lines 23-27, Sato)

As per claim 7:

Hirose and Sato teach all the subject matter as disclosed above. In addition, Sato further discloses a reception apparatus wherein the reception means receives the storage ECMs at a time. (Col. 7, lines 30-37, Sato)

As per claim 14:

Hirose teaches all the subject matter as disclosed above. Hirose does not explicitly disclose a reception apparatus wherein the TS packet includes an ECM, the auxiliary information being embedded in a portion to be encoded in a main body of the ECM, and the list generation means extracts the auxiliary information embedded in the ECM, and generates the list based on the auxiliary information.

Sato in analogous art, however, disclose a reception apparatus wherein the TS packet includes an ECM, the auxiliary information being embedded in a portion to be encoded in a main body of the ECM, and the list generation means extracts the auxiliary information embedded in the ECM, and generates the list based on the auxiliary information. (Col. 8, lines 17-27, Sato)

The rationale for combining the above references is the same as claim 5 above.

As per claim 16:

Hirose teaches all the subject matter as disclosed above. Hirose does not explicitly disclose a broadcast apparatus wherein the attaching means embeds the

auxiliary information in a portion to be encoded in a main body of an ECM and attaches the ECM to the predetermined unit of scrambled content.

Sato in analogous art, however, disclose a broadcast apparatus wherein the attaching means embeds the auxiliary information in a portion to be encoded in a main body of an ECM and attaches the ECM to the predetermined unit of scrambled content. (Col. 7, lines 1-3, Sato)

The rationale for combining the above references is the same as claim 5 above.

As per claim 20:

Hirose teaches all the subject matter as disclosed above. Hirose does not explicitly disclose a broadcast apparatus wherein the embedding means embeds the list in a portion to be encoded in a main body of at least one ECM to generate at least one piece of storage information.

Sato in analogous art, however, disclose a broadcast apparatus wherein the embedding means embeds the list in a portion to be encoded in a main body of at least one ECM to generate at least one piece of storage information. (Col. 7, lines 1-3, Sato)

The rationale for combining the above references is the same as claim 5 above.

As per claim 30:

Hirose teaches a computer-readable recording medium on which content to be broadcast to a reception apparatus is recorded, wherein the reception apparatus receives and stores scrambled content, and descrambles and reproduces the stored scrambled content, the content comprising:

scrambled content which is scrambled so that a predetermined unit of scrambled content, which is a portion of the scrambled content, is descrambled using a descrambling key corresponding to the predetermined unit of content, (Col. 2, lines 61-67; Col. 5, lines 19-23, Hirose) and

Hirose does not explicitly disclose a storage ECM, wherein a list including all descrambling keys used for descrambling the scrambled content is embedded in a portion to be encoded in a main body of at least one ECM.

Sato in analogous art, however, disclose a storage ECM, wherein a list including all descrambling keys used for descrambling the scrambled content is embedded in a portion to be encoded in a main body of at least one ECM. (Col. 7, lines 1-3, Sato)

The rationale for combining the above references is the same as claim 5 above.

13. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirose United States Letter Patent Number 5,917,915 in view of Morinaga et al. United States Letter Patent Number 6,792,000 and further in view of Ando et al. United States Publication No. 2003/0133699.

As per claim 10:

Hirose and Morinaga et al. teach all the subject matter as discussed above. In addition, Hirose further discloses a reception apparatus wherein the reception means receives (a) the predetermined unit of scrambled content (Col. 3, lines 2-14, Hirose) and

the storage means sequentially stores the received content, (Col. 3, lines 34-38, Hirose) wherein

the descramble processing means includes:

scrambled content extraction means for, when performing particular reproduction processes, extracting the predetermined unit of scrambled content and I picture information from one of the TS packets stored in the storage means; (Col. 10, lines 43-45, Hirose)

descrambling key extraction means for extracting a descrambling key from the list, only when the extracted predetermined unit of scrambled content consists of a portion of an I picture/an I picture; (Col. 3, lines 40-43, Hirose) and

descrambling means for descrambling the extracted predetermined unit of scrambled content using the extracted descrambling key. (Col. 10, lines 43-45)

In addition Morinaga et al. further disclose receiving and storing a transport stream packet (TS) packet. (Col. 4, lines 13-31, Morinaga)

Both references do not explicitly disclose unscrambled I picture information, wherein the I picture information indicates whether the TS packet corresponding to the information consists of a portion of an I picture/an I picture or not; and I picture judgment means for judging whether the extracted predetermined unit of scrambled content consists of a portion of an I picture/an I picture or not, based on the extracted I picture information.

Ando et al. in analogous art, however, discloses a system to manage digital TV broadcast data that uses a signal or radio wave that is segmented into a plurality of sets of TS packets to locate an I-picture at the head of each set. The I-picture is always located at the head, the I-picture address need not be described, and only the I-picture end address can be described. (Page 7, paragraphs 157 and 159; Figure 11)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the device disclosed by Hirose and Morinaga et al. to include unscrambled I picture information, wherein the I picture information indicates whether the TS packet corresponding to the information consists of a portion of an I picture/an I picture or not; and I picture judgment means for judging whether the extracted predetermined unit of scrambled content consists of a portion of an I picture/an I picture or not, based on the extracted I picture information. This modification would have been obvious because a person having ordinary skill in the art would have been motivated to do so, as suggested by, Ando et al. (Page 1, paragraph 21) in order to provide a system that can efficiently record a transport packet in a streamer which uses media capable of random access.

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Ishibashi U.S. No. 6,314,188

b. Kubota et al. U.S. No. 5,787,171

c. Ohishi U.s. No. 6,487,720

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shewaye Gelagay whose telephone number is 571-272-4219. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shewaye Gelagay
Examiner
Art Unit 2133

02/18/05

ALBERT DECADY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100